Application/Control Number: 10/019,795

Art Unit: 1700

CLMPTO/1754

04/02/02

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Claims 1 -8 are Cancelled

Claims 9 -20 are added

- 9. A procedure for manufacturing boehmitic and/or pseudo-boehmitic alumina by precipitating basic and/or acidic aluminum salts, comprising precipitating said salts from an aqueous medium containing the following as the crystal nuclei:
 - (a) 0.1 to 5 % w/w of alumina hydrates and/or aluminas relative to the precipitated alumina hydrates and computed as Al₂O₃, wherein the crystal nuclei (a) in the medium have an average diameter of 20 to 150 nm.
- 10. A procedure for manufacturing alumina hydrates by precipitating basic and/or acidic aluminum salts, comprising precipitating said salts from an aqueous medium containing the following as the crystal nuclei:
 - (b) 0.1 to 5% w/w of organic polymers/oligomers relative to the precipitated alumina hydrates and computed as Al₂O₃, which form latices in the medium, wherein the crystal nuclei (b) in the medium have an average diameter of 12 to 250 nm.
- A procedure according to any one of claims 9 or 10 wherein the average diameter is from 50 to 100 nm.
- 12. A procedure according to any one of claims 9 or 10, wherein crystal nuclei in an amount of 0.5 to 2 % w/w relative to the precipitated alumina hydrates and computed as Al₂O₃ are used for precipitation.

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13. A procedure according to any one of claims 9 or 10, wherein the crystal nuclei are prepared in an aqueous, acidic solution and one or more basic aluminum salts and one or more acidic aluminum salts are jointly added.

- 14. A procedure according to claim 10, characterized in that polyacrylic acids, polymethacrylic acid, polyacrylates, polystyrenes, polyvinyl acetates, polyvinyl versalates and their mixtures or copolymers are used as organic polymers.
- 15. A procedure according to any one of claims 9 or 10, characterized in that alkali aluminates, earth alkali aluminates or aluminum hydroxy salts are used as the basic aluminum salts.
- 16. A procedure according to any one of claims 9 or 10, characterized in that aluminum sulfate, aluminum nitrate, aluminum chloride or aluminum formiate are used as the acidic aluminum salts.
- 17. A procedure according to any one of the claims 9 or 10, characterized in that the bulk of the alumina hydrate is precipitated at a pH value of 5 to 9.

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- 18. A procedure according to claim 17 wherein the pH value is from 6 to 8.
- 19. A boehmitic alumina and/or pseudo-boehmitic alumina with a pore volume of 1.25 to 1.6 ml/g and an average pore radius of 6 to 12 nm, each relative to a determination based on pore radii of 0 to 100 nm, at a crystallite size, determined on the 120 reflex, of 3 to 5 nm, manufactured according to a procedure of any one of claims 9 or 10.
- 20. A procedure for manufacturing boehmitic and/or pseudo-boehmitic alumina by precipitating basic and/or acidic aluminum salts comprising precipitating said salts from an aqueous medium containing the following crystal nuclei:
 - (a) 0.1 to 5 w/w of alumina hydrates and/or aluminas relative to the precipitating alumina hydrates and computed as Al₂O₃ wherein the crystal nuclei (a) in the medium have an average diameter of 20 to 150 nm and,
 - (b) 0.1 to 5% w/w of organic polymers/oligomers relative to the precipitated alumina hydrates and computed as Al₂O₃, which form lattices in the medium, wherein the crystal nuclei (b) in the medium have an average diameter of 12 to 250 nm.

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